



December 8, 1999
Project No. 97664V3

Ms. Brenda Pohlmann
Nevada Division of Environmental Protection
555 E. Washington, Suite 4300
Las Vegas, NV 89101-1049

RE: *Results of monthly surface water sampling of the Las Vegas Wash at the Northshore Road bridge.*

PROVIDING

- Geotechnical Engineering
- Construction Materials Testing
- Environmental Site Assessments
- Drilling Services

Dear Ms. Pohlmann:

Per your request, Geotechnical & Environmental Services, Inc. (GES) obtained a surface water sample from the Las Vegas wash on November 28, 1999 near the Northshore Road Bridge. We sent this sample, under chain-of-custody protocol, to NEL Laboratories (NEL) for laboratory analysis of perchlorate. NEL's analysis revealed a perchlorate concentration of 520 micrograms per Liter ($\mu\text{g/L}$). The NEL report is included with this letter, along with a 1999 Perchlorate Summary Table.

Our services were performed using that degree of care and skill ordinarily exercised under similar circumstances by reputable engineering firms in this or similar localities. No other warranty, either express or implied, is included or intended in this report.

We appreciate this opportunity to provide our services. If you have any questions regarding these results, please feel free to call us at 365-1001.

Sincerely,

Geotechnical & Environmental Services, Inc.

Daniel C. Burns, C.E.M.*
(Expires 10/07/2001)
Project Manager

Gregory P. DeSart, P.E., C.E.M.
C.E.M. (Expires 12/22/2000)
President

* "I hereby certify that I am responsible for the services described in this document and for the preparation of this document. The services described in this document have been provided in a manner consistent with the current standards of the profession and to the best of my knowledge comply with all applicable federal, state and local statutes, regulations and ordinances."

dlr

Enc: NEL Analytical Report
1999 Perchlorate Summary Table

Dist: faxed to addressee at 486-2863
1 original mailed to addressee
cc to Jeff Gibson, American Pacific
cc to Kevin Mayer, USEPA SFD 72, 75 Hawthorne Street, San Francisco, CA 94105
cc to project file 97664V3

7560 W. Sahara Ave., Suite 101 Las Vegas, NV 89117
(702) 365-1001 • Fax (702) 341-7120

www.gesnevada.com

**Las Vegas Wash at Northshore Road Bridge
1999 Summary of Perchlorate Concentrations**

Date Sampled	Perchlorate (µg/L)
1/15/99	580
1/29/99	670
2/12/99	600
2/25/99	680
3/26/99	670
4/30/99	180
5/27/99	950
6/25/99	700
7/22/99	710
8/26/99	710
9/26/99	820
10/29/99	760
11/29/99	520

NEL LABORATORIES

Reno • Las Vegas
Phoenix • So. California

Las Vegas Division
4208 Arcata Way, Suite A • Las Vegas, NV 89030
(702) 657-1010 • Fax: (702) 657-1577
1-888-368-3282

CLIENT: Geotechnical & Env. Serv.
7560 West Sahara Ave. #101
Las Vegas, NV 89117
ATTN: Dan Burns

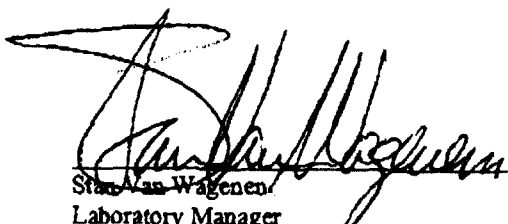
PROJECT NAME: FPF/97664 V3
PROJECT NUMBER: 97664 V3

NEL ORDER ID: L9911224

Attached are the analytical results for samples in support of the above referenced project.

Samples submitted for this project were not sampled by NEL Laboratories. Samples were received by NEL in good condition, under chain of custody on 11/29/99.

Should you have any questions or comments, please feel free to contact our Client Services department at (702) 657-1010.


Stan Van Wageningen
Laboratory Manager

12/8/99
Date

CERTIFICATIONS:

	Reno	Las Vegas	S. California
Arizona	AZ0520	AZ0518	AZ0605
California	1707	2002	2264
US Army Corps of Engineers	Certified	Certified	

	Reno	Las Vegas	S. California
Idaho	Certified	Certified	
Montana	Certified	Certified	
Nevada	NV033	NV052	CA084
L.A.C.S.D.			10228

NEL LABORATORIES

CLIENT: Geotechnical & Env. Serv.
PROJECT ID: FPF/97664 V3
PROJECT #: 97664 V3
TEST: Inorganic Non-Metals
MATRIX: Aqueous

CLIENT ID: North Shore Road Bridge
DATE SAMPLED: 11/29/99
NEL SAMPLE ID: L9911224-01

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZED</u>
Perchlorate	520	40.	10	CA DHSM - IC	µg/L	12/8/99

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

NEL LABORATORIES

CLIENT: Geotechnical & Env. Serv.
PROJECT ID: FPF/97664 V3
PROJECT #: 97664 V3
TEST: Non-Metals

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: 120899-CLO4-BLK

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZED</u>
Perchlorate	ND	4	1	CA DHSM - IC	µg/L	12/8/99

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory

**Reno • Las Vegas
Phoenix • So California**

Project Name:	Project Number:
ETP	97664 V3
Purchase Order Number:	Sampled By:
1496	Don Buss

NEI WORK
A 9911 2024

003

3	
---	--

pool

3

100

1000 JOURNAL OF CLIMATE

1

50